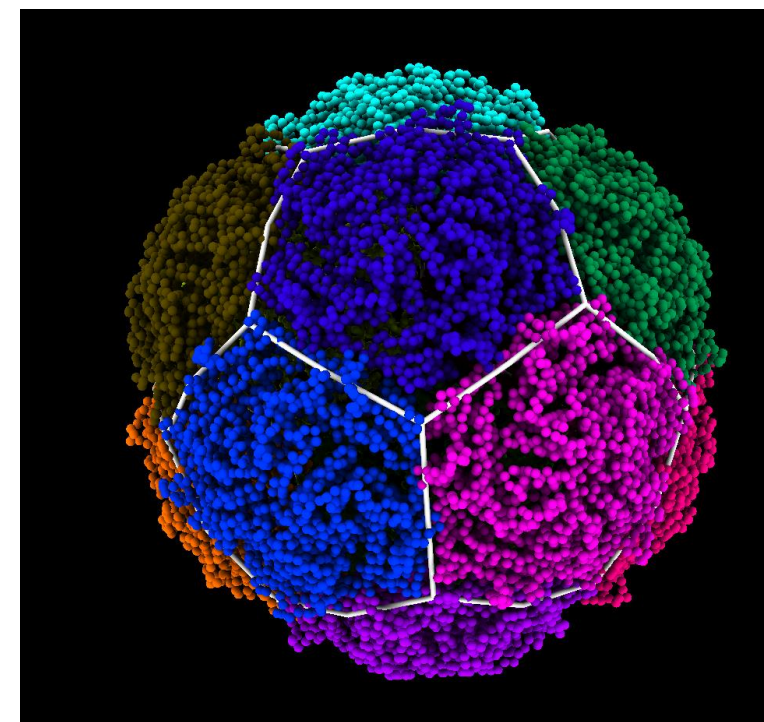
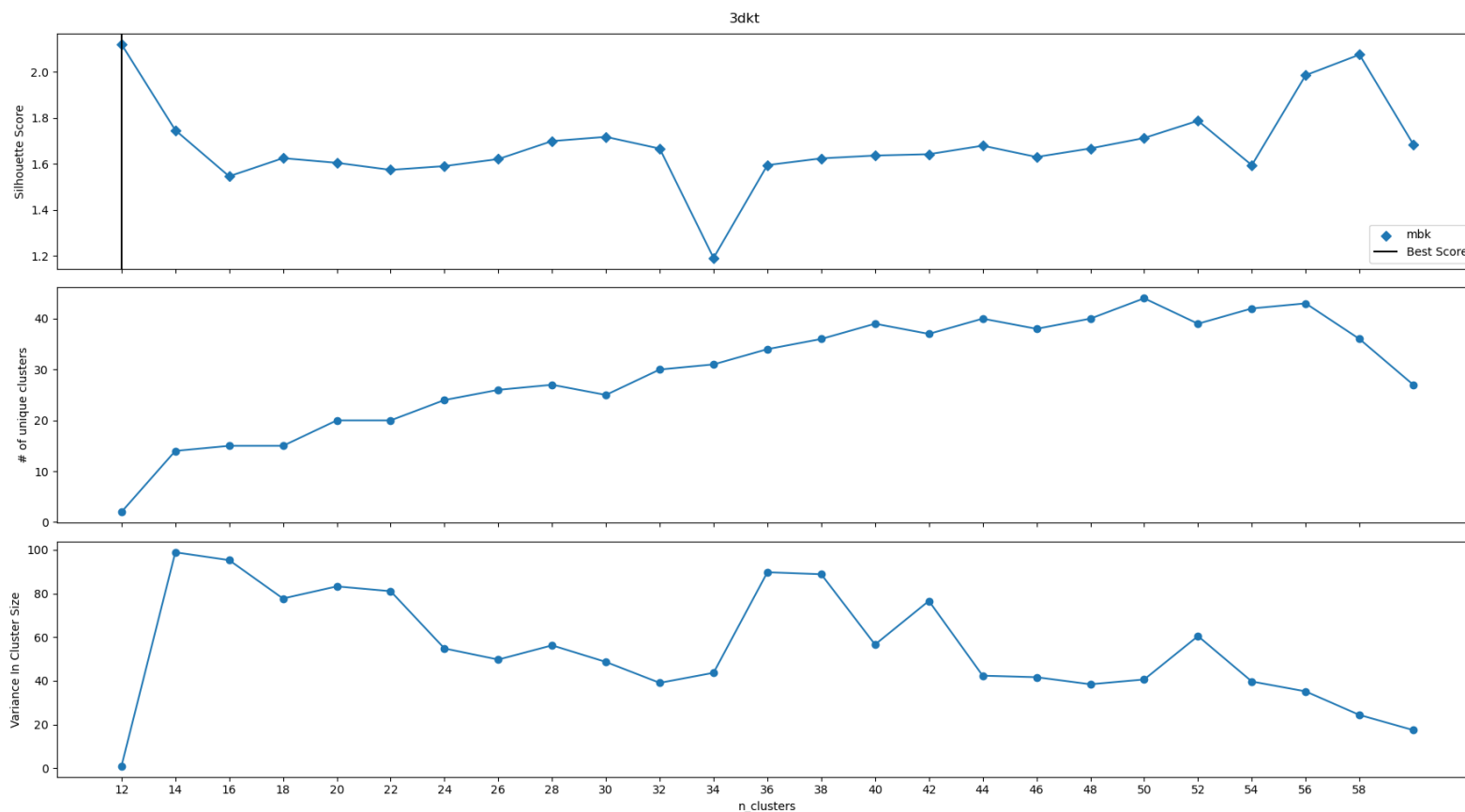


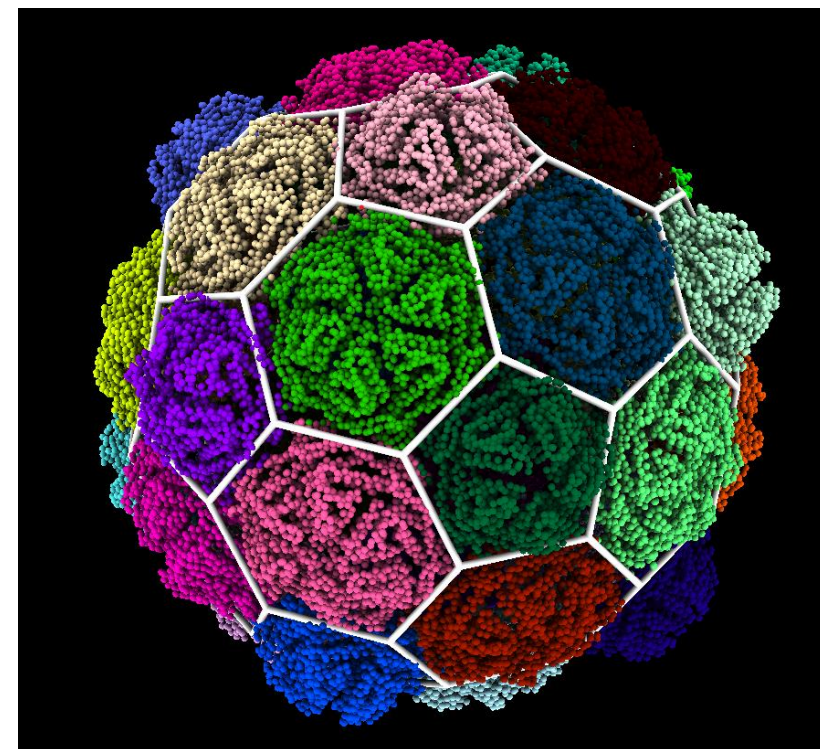
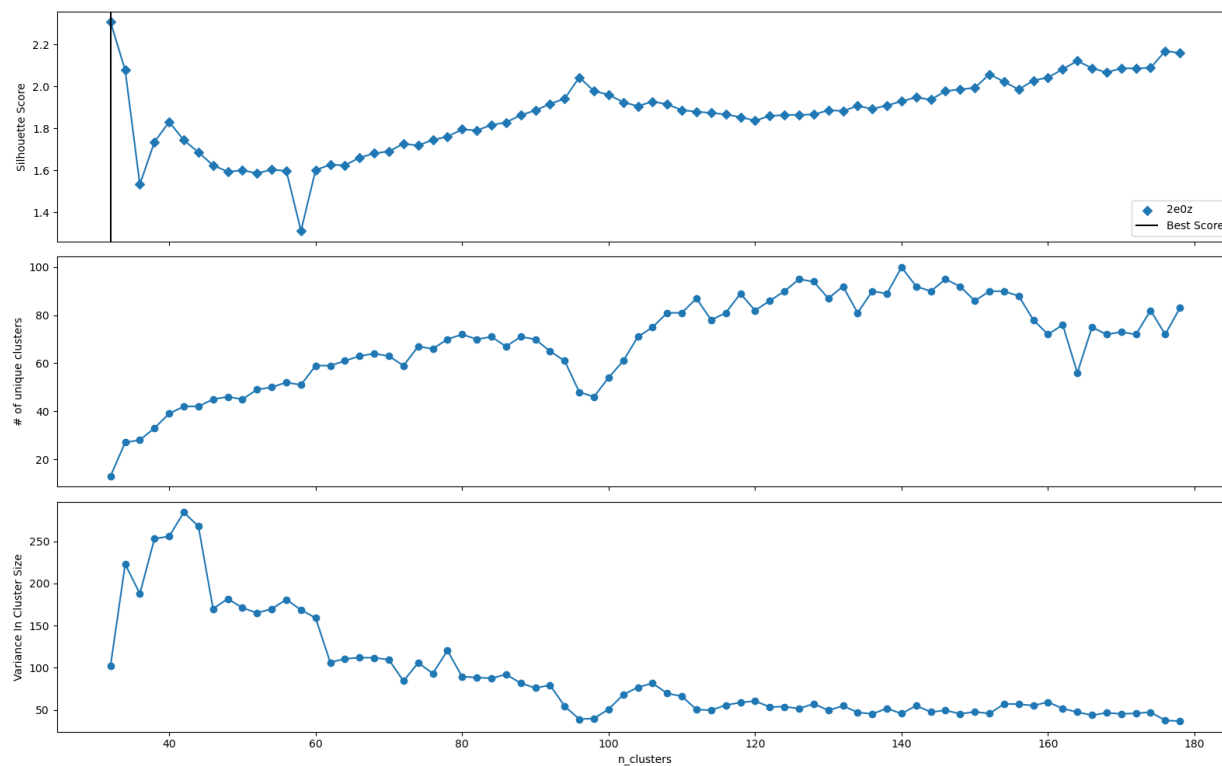
HK97 Results

Thermotoga Maritima Encapsulin (3dkt)



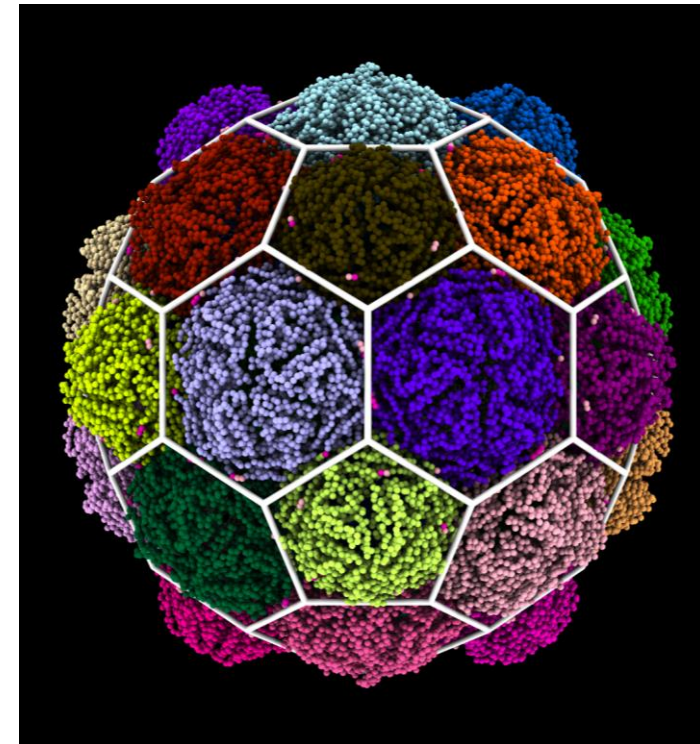
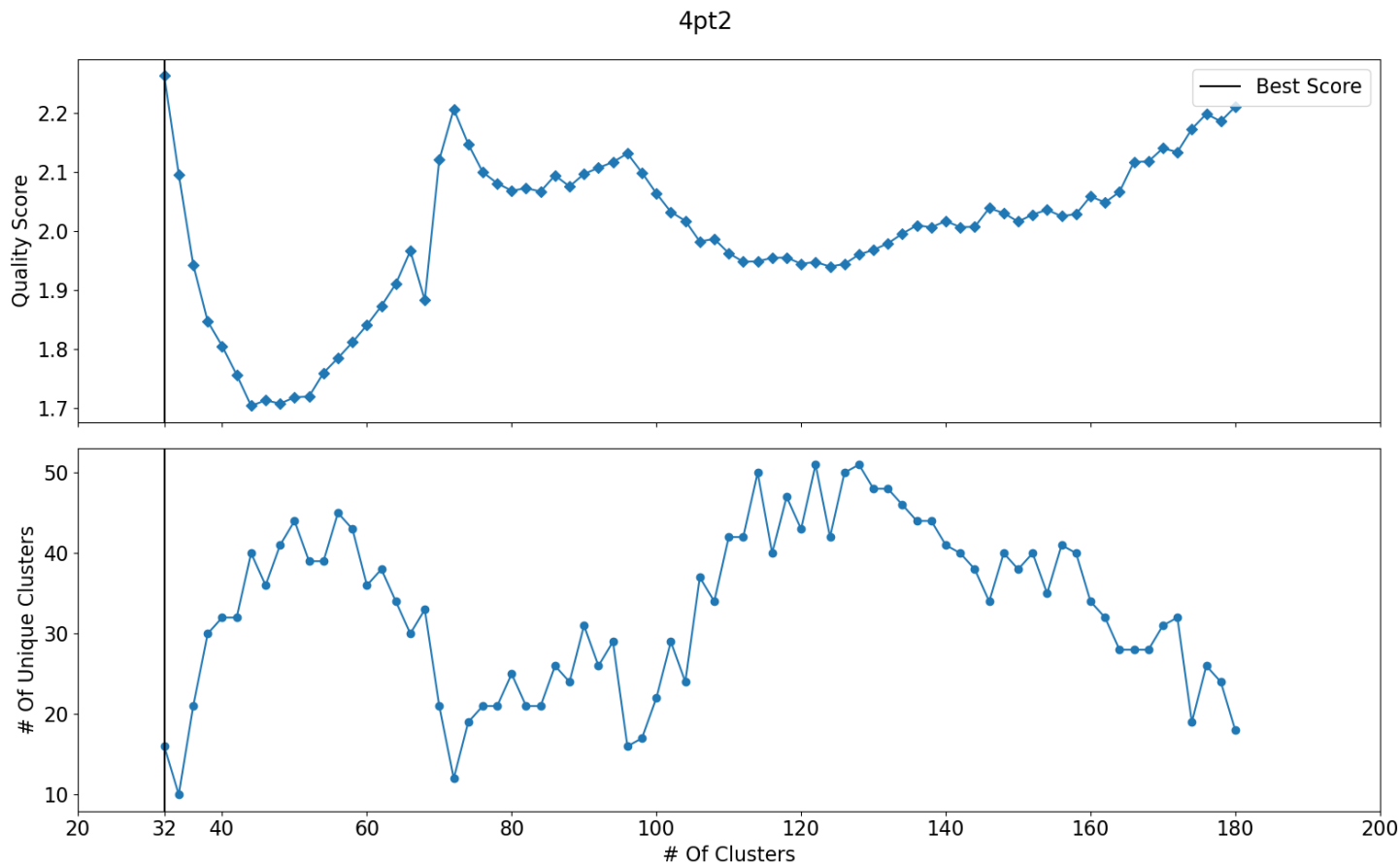
T=1 Hexagonal
12 Pentagonal Clusters Containing 5 MCPs

VLP From *Pyrococcus Furiosus* (2e0z)



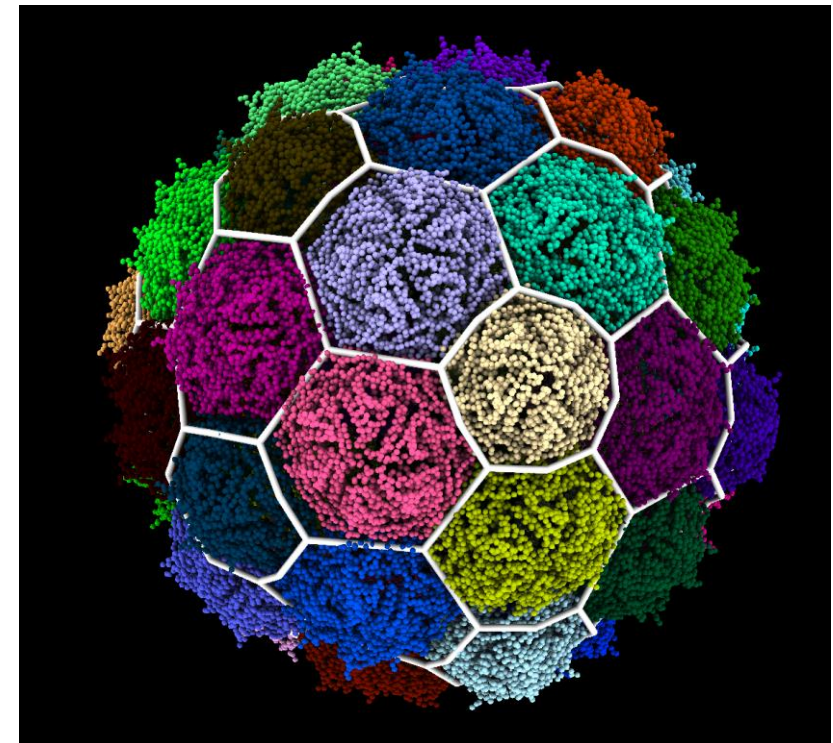
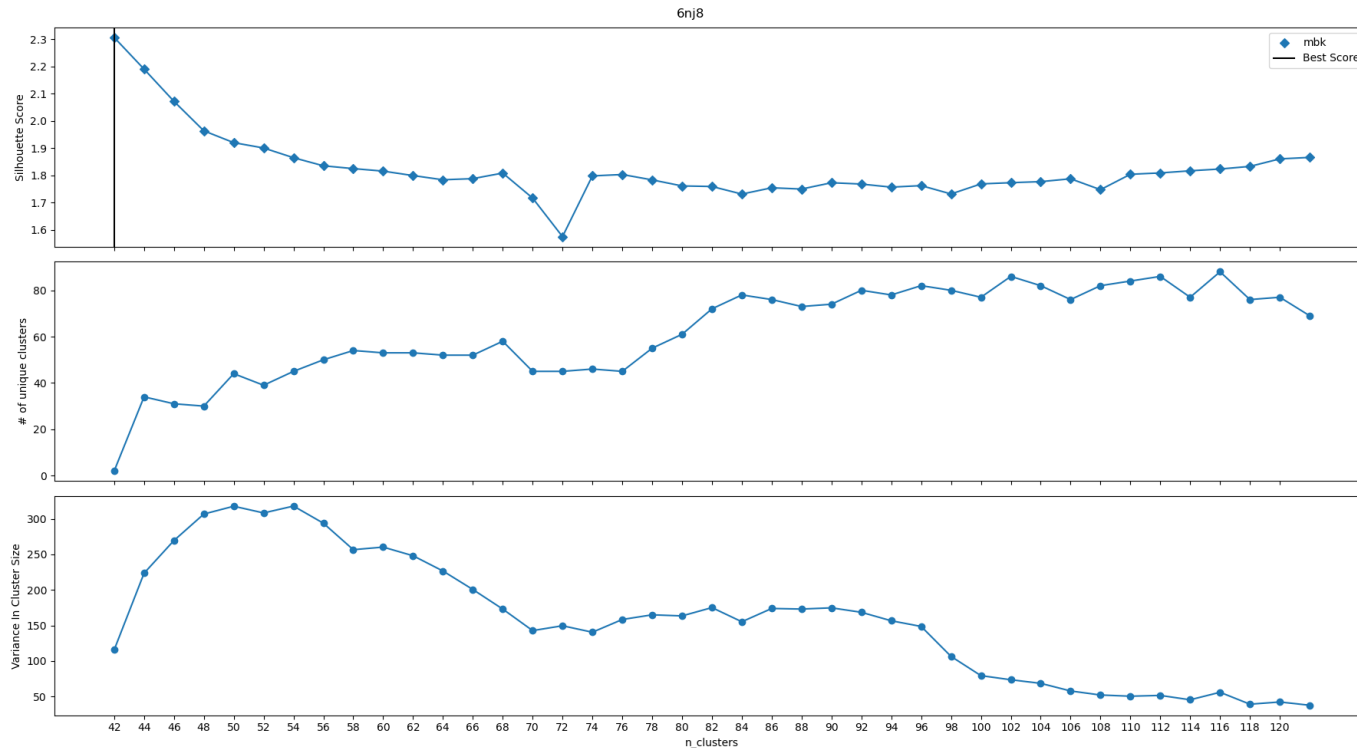
T=3 Hexagonal
12 Pentagonal Clusters containing 5 MCPs
20 Hexagonal Clusters containing 6 MCPs

Myxococcus Xanthus Encapsulin (4pt2)



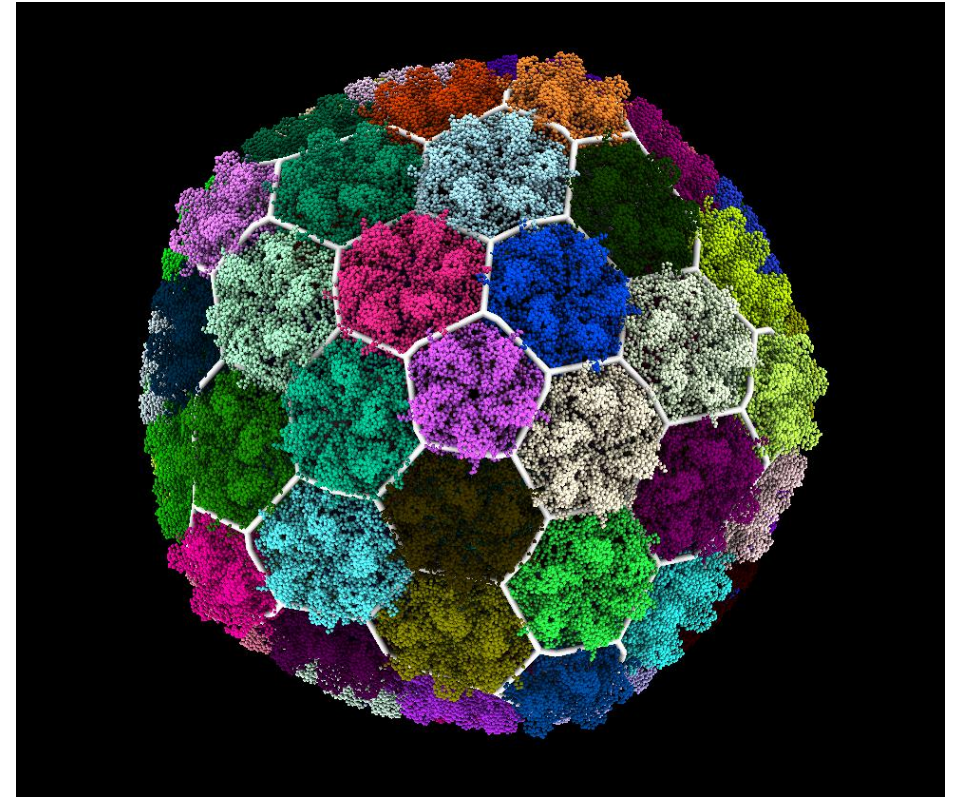
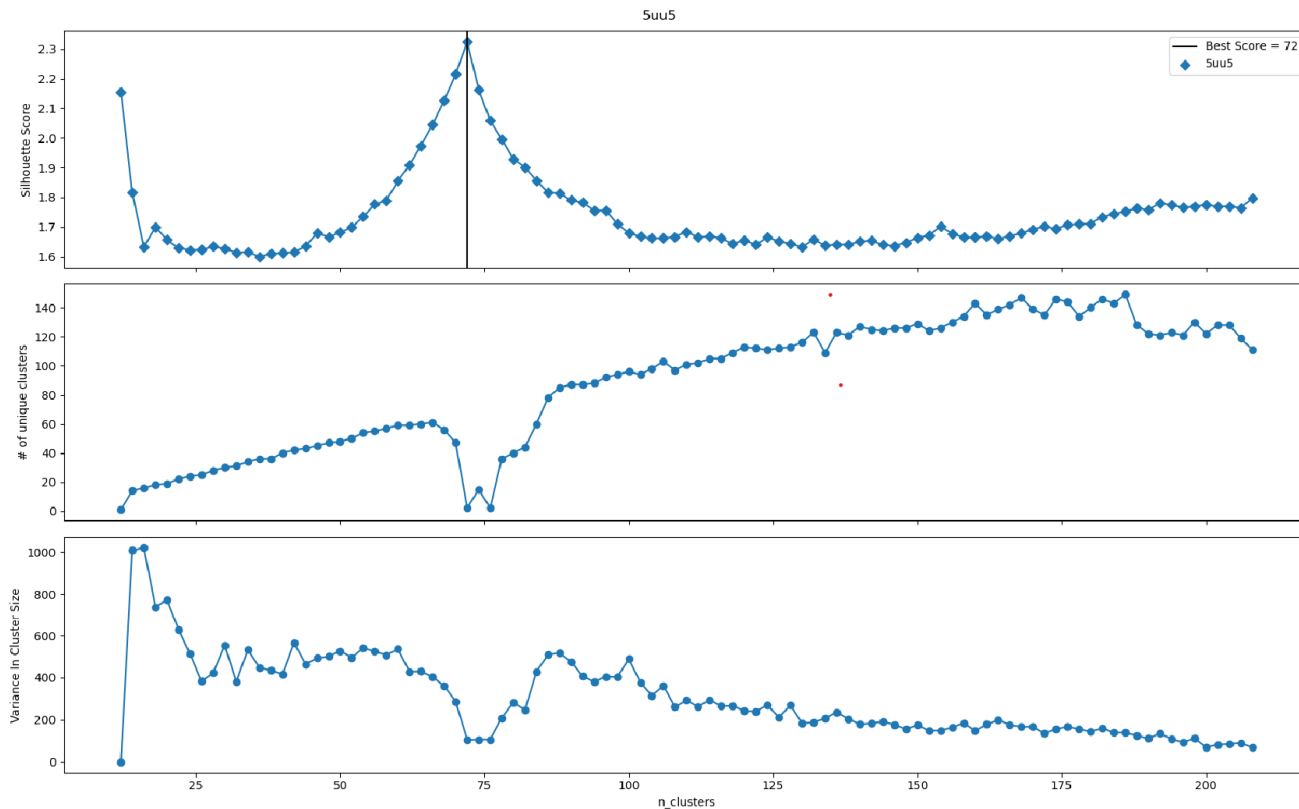
T=3 Hexagonal
12 Pentagonal Clusters containing 5 MCPs
20 Hexagonal Clusters containing 6 MCPs

Iron Storage Encapsulin From *Quasibacillus thermotolerans* (6nj8)



T=4 Hexagonal
12 Pentagonal Clusters containing 5 MCPs
30 Hexagonal Clusters containing 6 MCPs

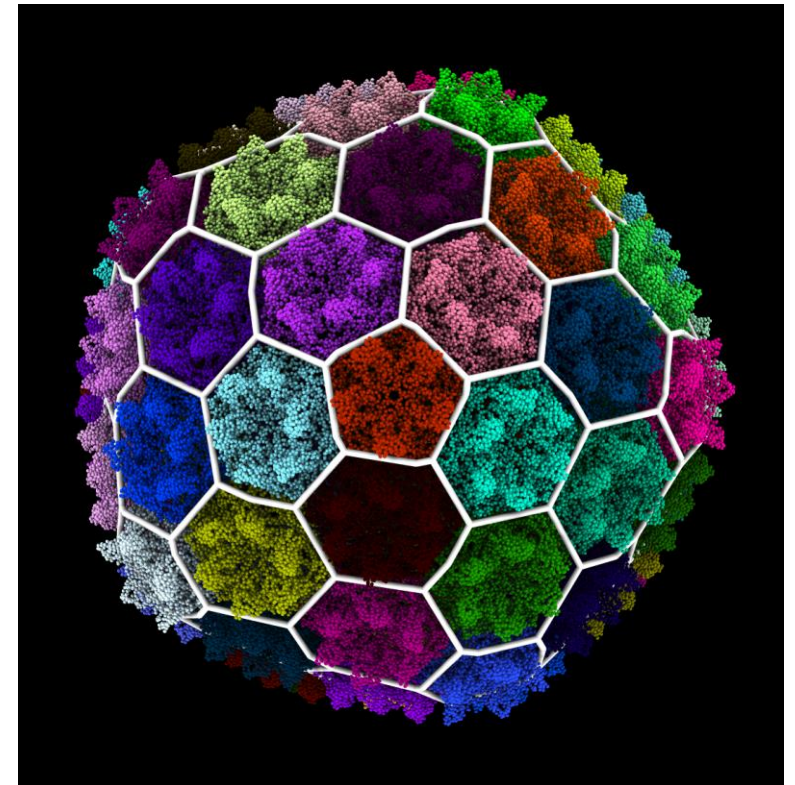
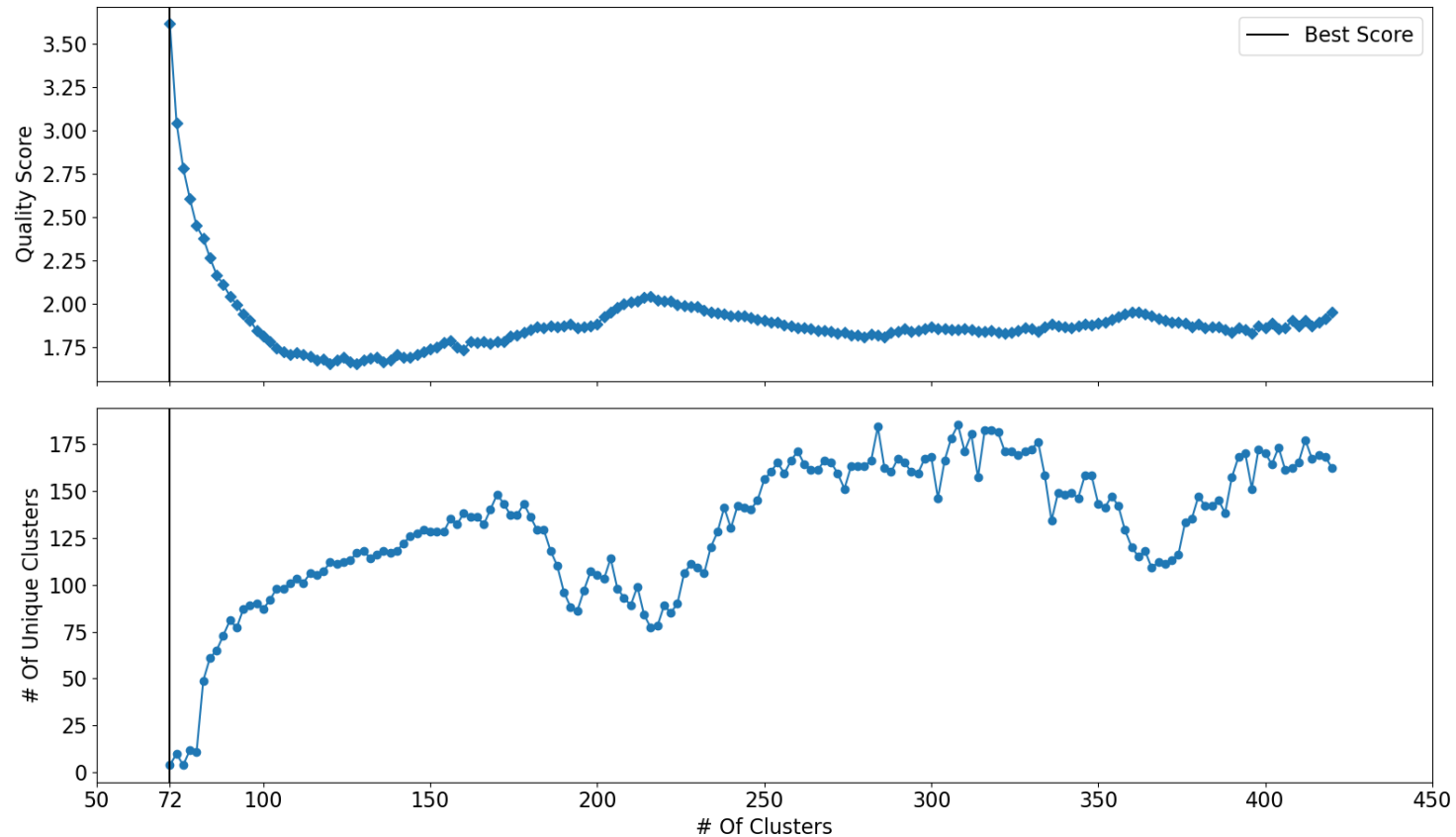
Bacteriophage P22 Mature Virion (5uu5)



T=7 Hexagonal
12 Pentagonal Clusters containing 5 MCPs
60 Hexagonal Clusters containing 6 MCPs

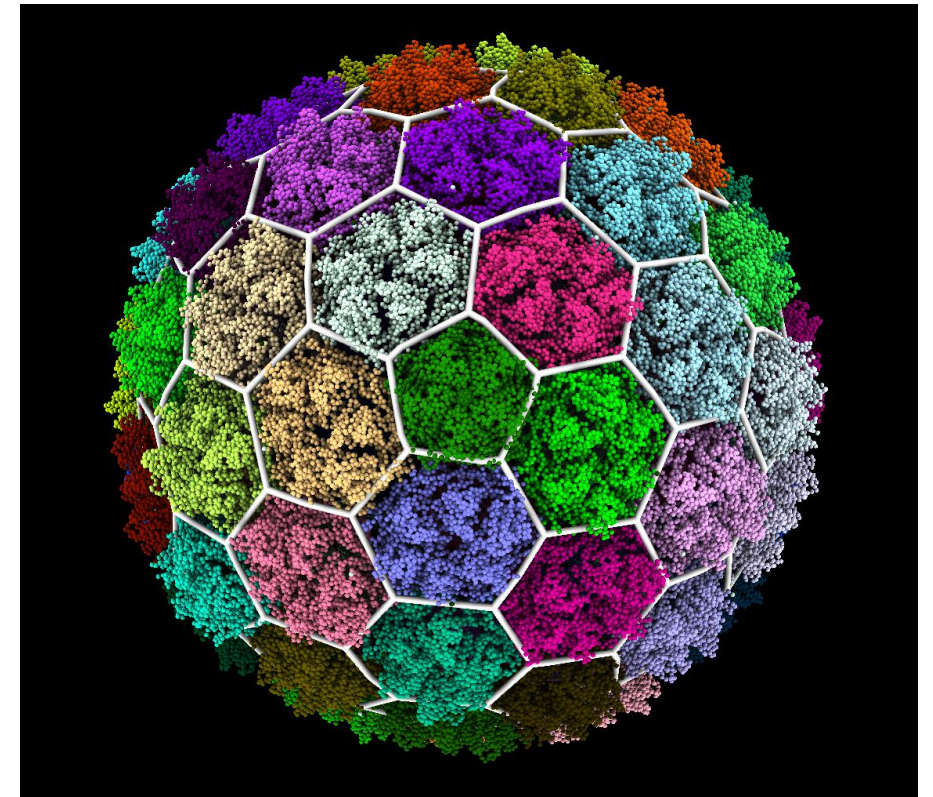
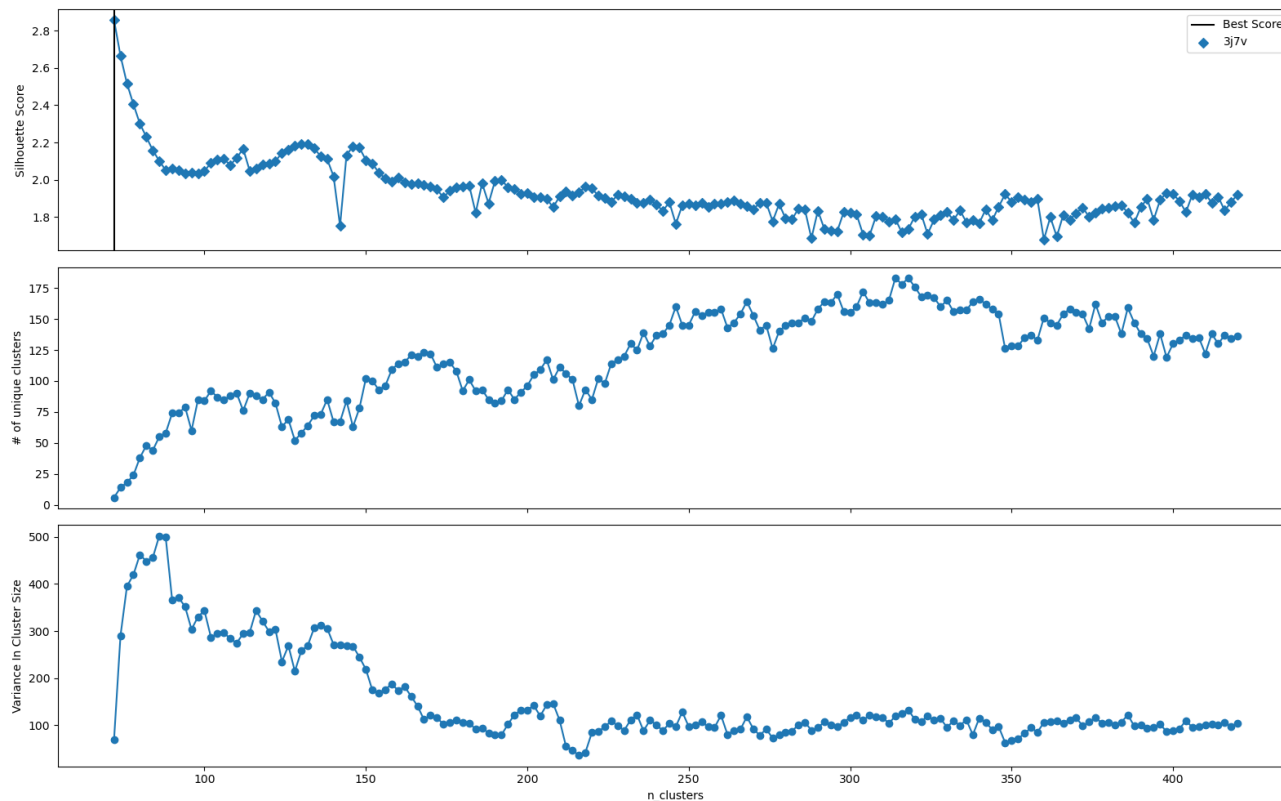
Bacteriophage Sf6 (5135)

5135



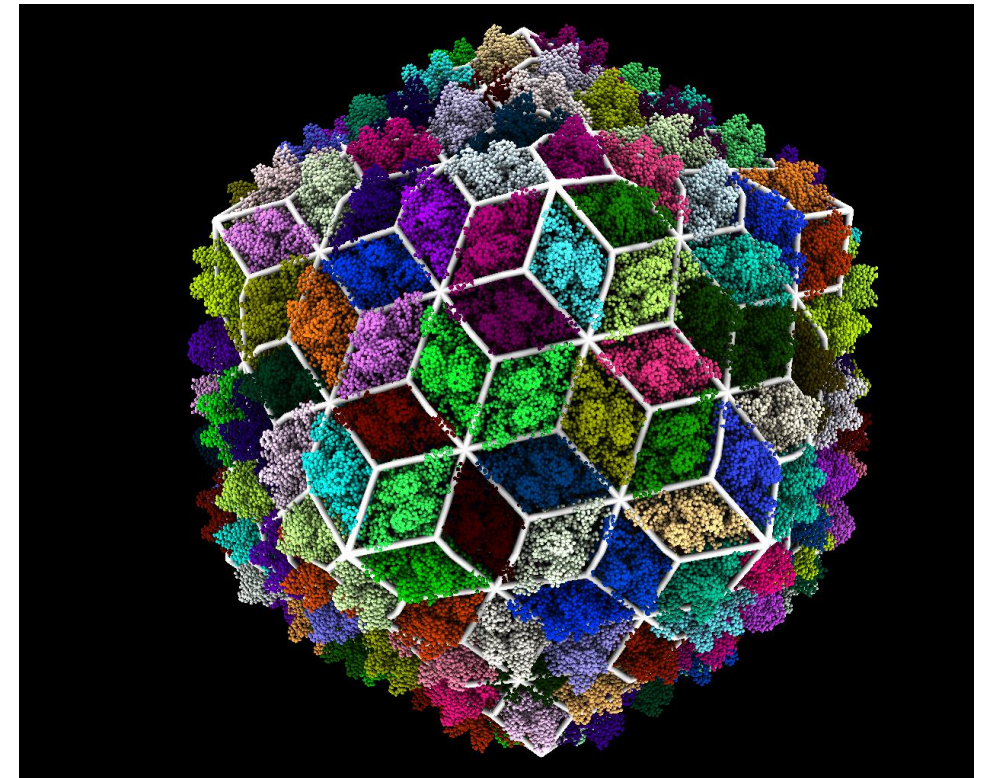
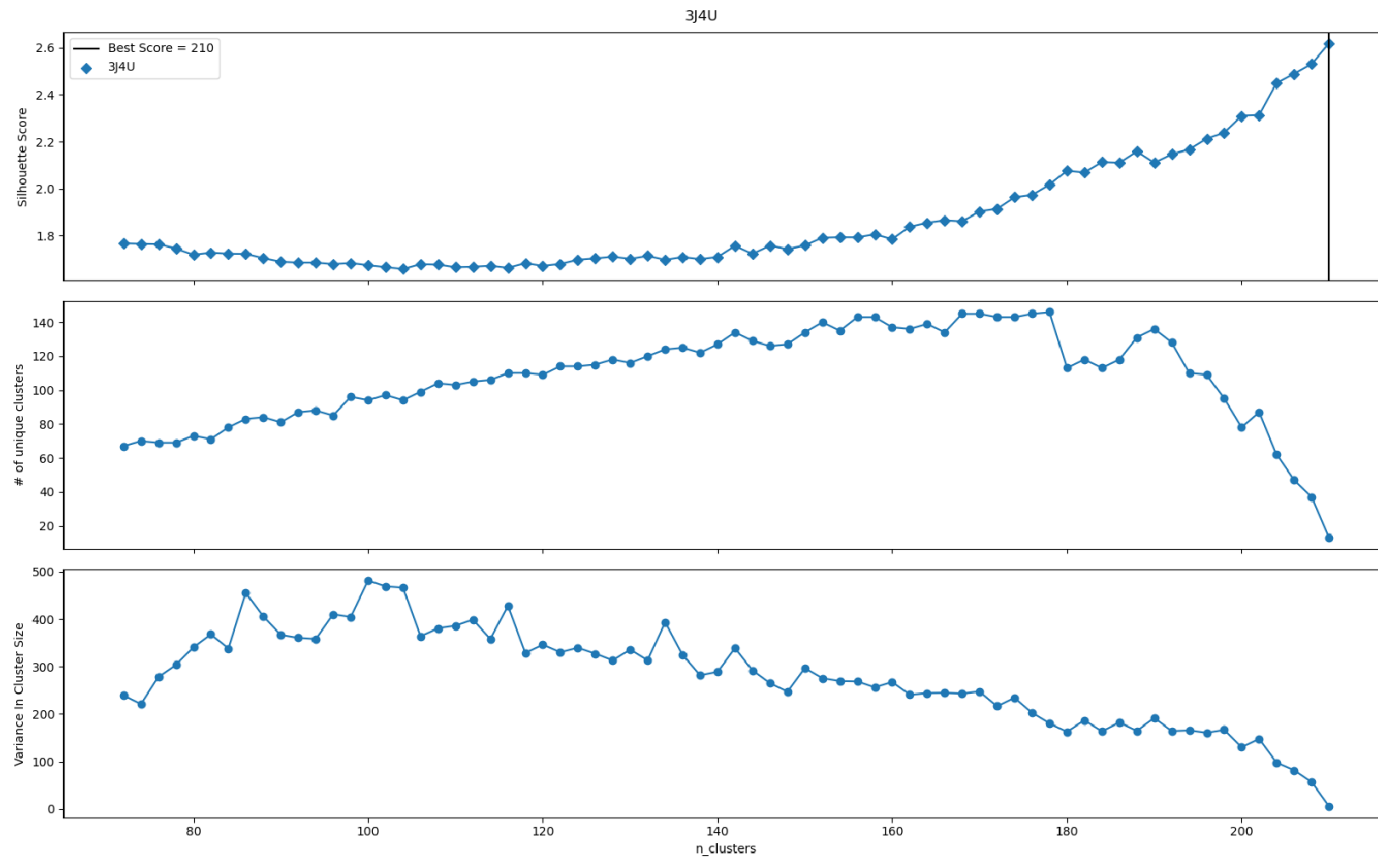
T=7 Hexagonal
12 Pentagonal Clusters containing 5 MCPs
60 Hexagonal Clusters containing 6 MCPs

Bacteriophage T7 Procapsid (3j7v)



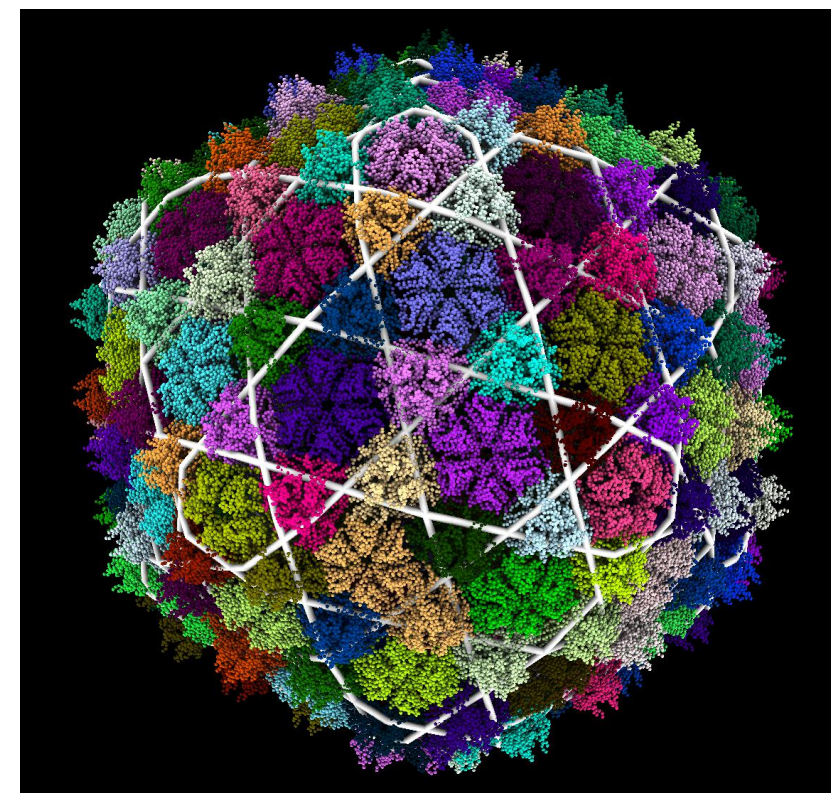
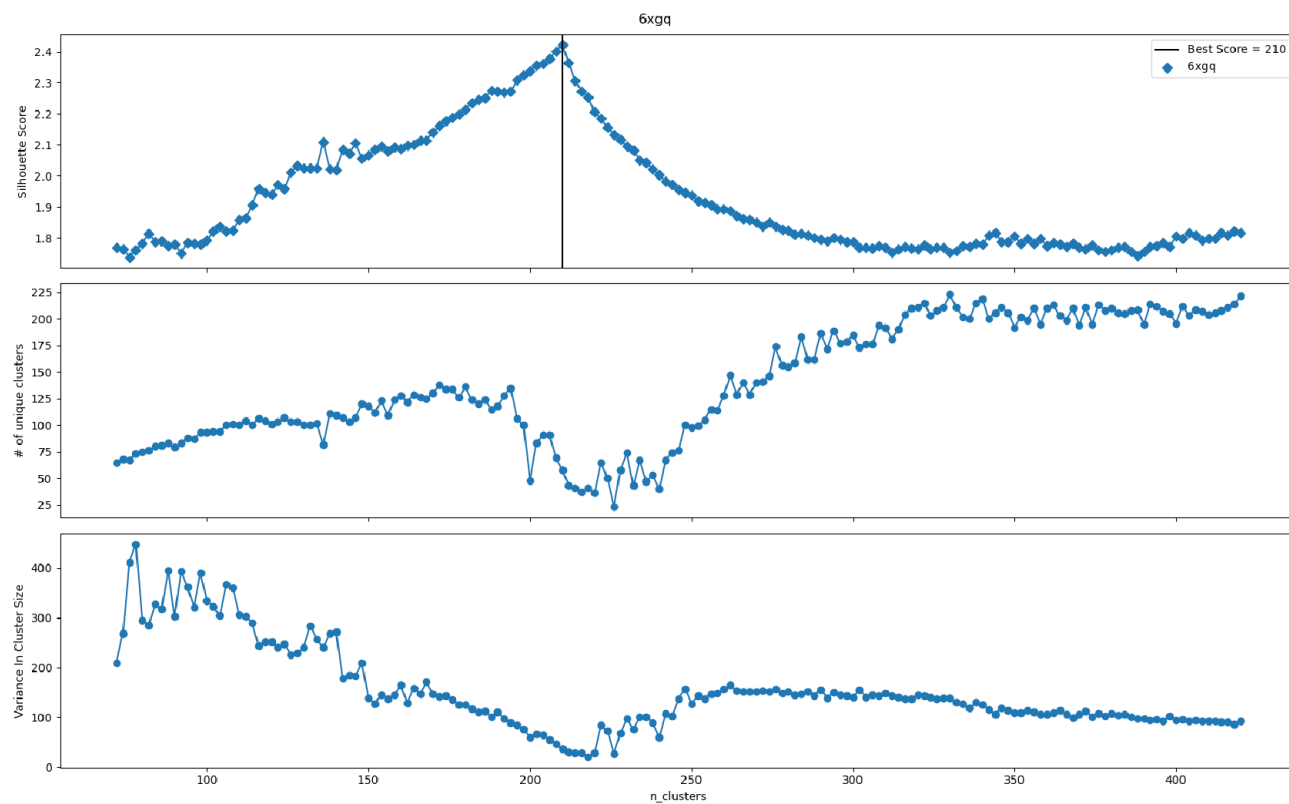
T=7 Hexagonal
12 Pentagonal Clusters containing 5 MCPs
60 Hexagonal Clusters containing 6 MCPs

Bordetella Bacteriophage (3j4u)



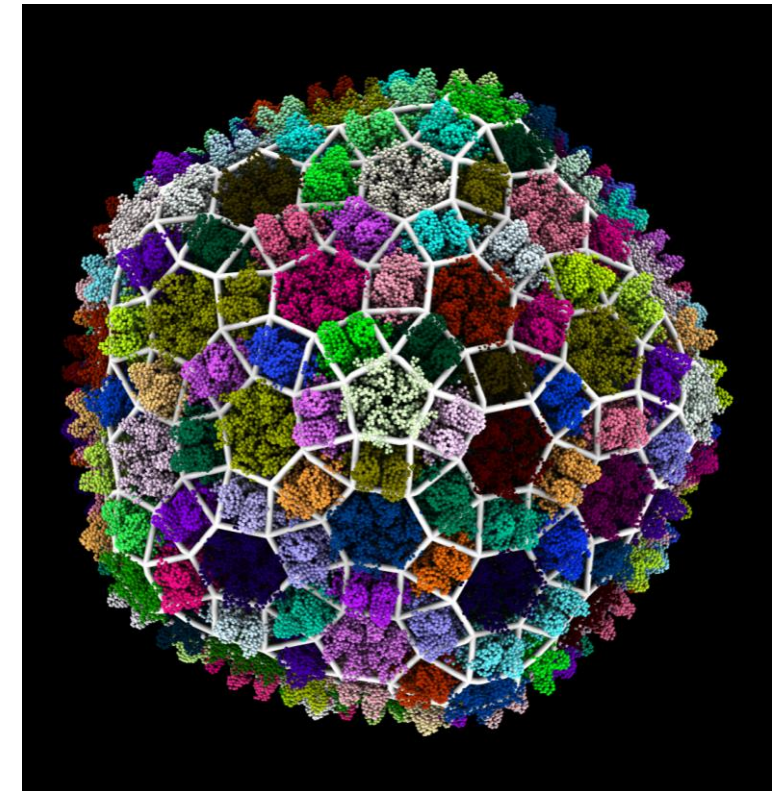
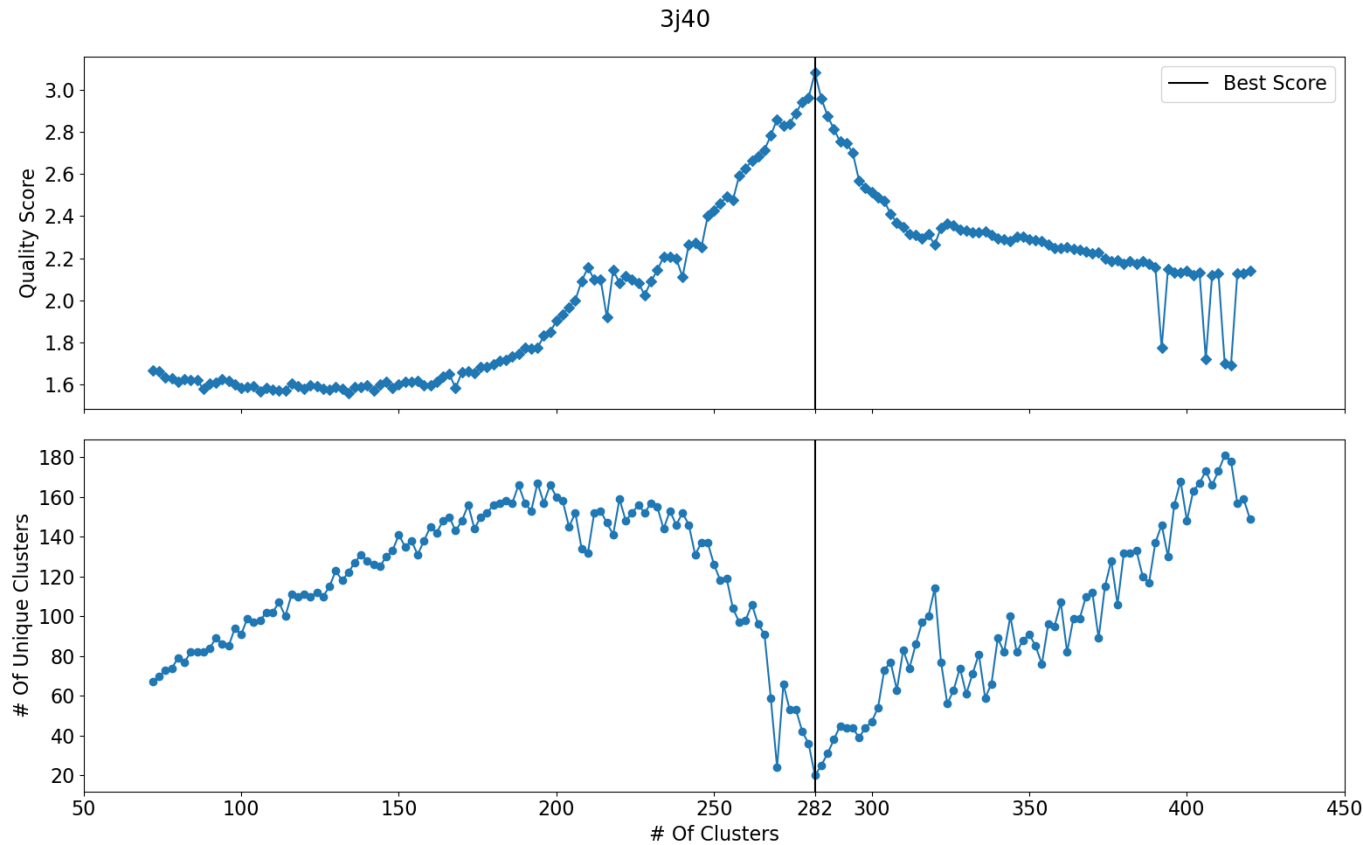
T=7 Trihex-Dual (Imperfect Clustering)
210 Clusters Containing ~2 MCPs and 2 mCPs

YSD1 Bacteriophage (6xgq)



T=7 Trihexagonal (Imperfect Clustering)
12 Pentagonal Clusters containing 5 MCPs
60 Hexagonal Clusters containing 6 MCPs
140 Triangular Clusters containing 3 mCPs and MCP Extended Domains

Bacteriophage Epsilon15 (3j40)



T=7 Pseudo-Rhombitrihexagonal
12 Pentagonal Clusters containing 5 MCPs
60 Hexagonal Clusters containing 6 MCPs
210 Clusters containing 2 mCPs and MCP Extended Domains

Discussion

- ▶ P22 lacked reinforcement proteins and was labelled as hexagonal
- ▶ Bordetella and Phage YSD1 had reinforcement proteins around the local 2-fold and 3-fold axes respectively and were labeled as trihex-dual and trihex.
- ▶ This suggests the presence and location of reinforcement proteins could determine lattice structure.
- ▶ Both Bordatella and YSD1 had error in their label assignments. The tool becomes less accurate at a large number of clusters.